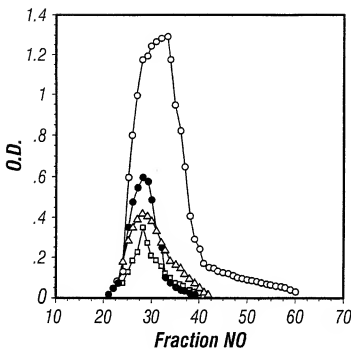


Comparison of concentrations of complexes of LDL or denatured LDL with acute phase response protein (A), coagulation fibrinolytic system protein (B) and disinfectant protein (C), among three groups different in blood lipid concentration

FIG. 1

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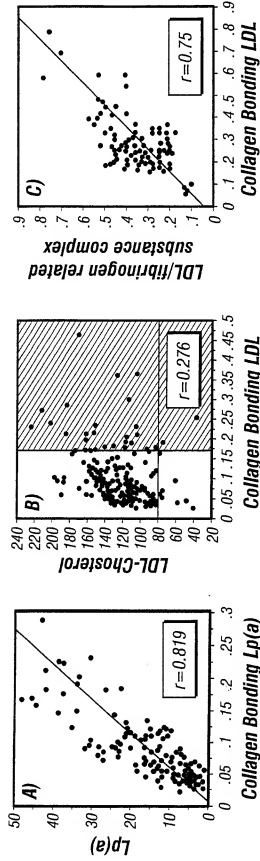


- Anti-ApoB/anti-ApoB(LDL)
- Anti-fibronectin/anti-ApoB (LDL-fibronectin complex)
- △— Collagen/anti-ApoB
- Anti-fibrinogen/anti-ApoB (complex with LDL-fibrinogen related component)

LDL-fibrinogen related component, LDL-fibronectin complex and collagen bonding lipoprotein, present in human serum LDL fraction

FIG. 2

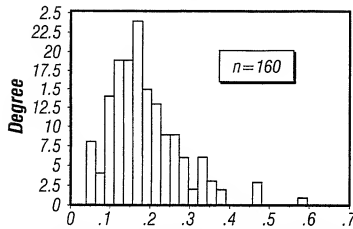
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Relationship between blood Lp(a) concentration and extracellular substrate protein (collagen) bonding Lp (a) concentration, relationship between blood LDL-cholesterol concentration and concentration of novel lipoprotein concerning arteriosclerotic lesion, and relationship between concentration of complex with LDL-fibrinogen related substance and concentration of collagen bonding LDL

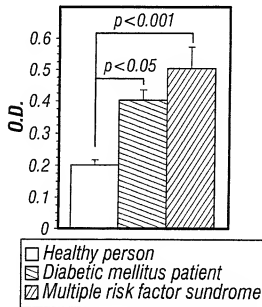
FIG. 3

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Distribution of concentration of LDL-fibrinogen related substance complex in serum of healthy person

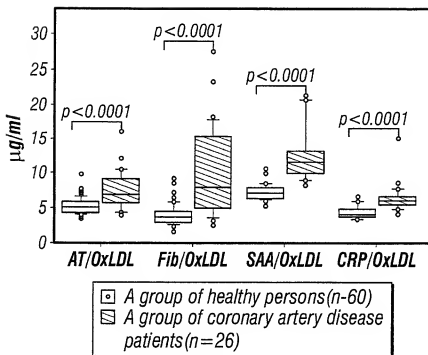
FIG. 4



Comparison of amounts of LDL-fibrinogen related substance complex in healthy person, diabetic mellitus patient and multiple risk factor syndrome

FIG. 5

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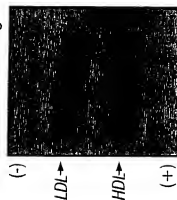
Distribution of concentrations of AT/OxLDL, fib/OxLDL, SAA/OxLDL, CRP/OxLDL complexes in the serums of a group of healthy persons (those taking health examinations) and a group of coronary artery disease patients (those found by photograph examination with more than 50% stricture in their main coronary arteries)

FIG. 6

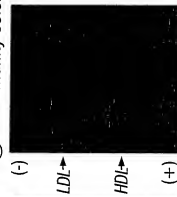
B) Changes in HDL-cholesterol values following oxidation and formation of oxidized LDL-SAA complex

A) Agarose electrophoresis

① Fat red coloring

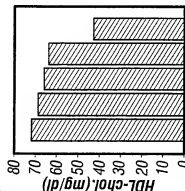


② SAA1 immunity coloring



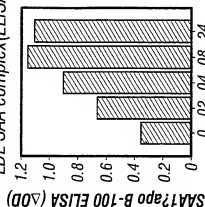
(10⁻¹¹ M of copper sulfate)
Oxidation time
0 02 04 08 24

① Changes in HDL-cholesterol concentration



(10⁻¹¹ M of copper sulfate)
Oxidation time
0 02 04 08 24

② Formation of oxidized LDL-SAA complex(ELISA)



(10⁻¹¹ M of copper sulfate)
Oxidation time
0 02 04 08 24

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Review of the formation mechanism of oxidized LDL-(serum amyloid A1:SAA) complex

After equal amounts of native LDL and native HDL were mixed, 10⁻¹¹ M of copper sulfate was added, and the mixture was left at 37°C. Oxidized LDL-SAA complex was formed in accordance with the degree of oxidation(Fig. 7,A-②, B-②).

On the other hand, HDL-cholesterol values lowered following oxidation(Fig. 7,B ①).

FIG. 7